

**Reply Under 37 CFR 1.116
Expedited Procedure
Technology Center 2634**

REMARKS/ARGUMENTS

All thirty of the claims originally filed in this application are currently pending. No new claims have been added by this response. Consequently, it is believed that no additional PTO fees have been generated. If it is determined, however, that additional fees are due in this application, the Commissioner is hereby authorized to charge Deposit Account No. 18-1722 in the amount of such fees.

Claims 13, 15, 19, 20 and 21 have been amended to clarify the recursive nature of these claims. Independent claims 13 and 20 include, for example, a pre-decimate integrator filter section comprising at least one integrator stage. Hogenauer does not teach any pre-decimate integrator structures for the CIC filter. Further, both Yang and Gao do not use integrator structures in their parallel, pre-decimate CIC filters, both are non-recursive, whereas the claimed architecture is a synthesized combination of parallel pre-decimation processing and recursive integration (i.e. N integrators for N stages). Since there is no integration recursion in the filter structures of either Yang or Gao, there is no equivalence between their filter's transfer function and a Hogenauer cascaded CIC filter's transfer function. Therefore, amended claims 13 and 20 (and all claims dependent thereon), are believed to be allowable over the cited combination of references.


Applicant believes that the above remarks fully address the issues and rejections raised in the final Office action and establish that the pending claims are allowable over the stated rejections. The amendments presented herein are intended to place the application in condition for allowance. Further, it is noted that the recursive feature of

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the claims is cited in the Examiner's statement of reasons for the allowance of claims 1-12 and 26-30. Thus, the amendments presented herein are expected to require only a cursory review by the Examiner. No additional search or extensive review and consideration should be required. Consequently, entry of the amendments and issuance of a Notice of Allowance is respectfully requested.

Respectfully Submitted,

By


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